

For each question, you need to find the answer and show your work. Each problem is worth 3 points: one for the correct answer and two for showing your work. For some problems, you may just need to write out how you know you have the correct answer.

1. Estimate the product 296×53 .

2. Estimate the product 703×288 .

3. Estimate the product 644×97 .

4. Estimate the quotient $1458 \div 19$.

5. Estimate the quotient $47489 \div 62$.

6. Estimate the quotient $8442 \div 82$.

7. During the first 3 days of the semester, your school recycles the following number of cans: 335, 321, and 332. If you continue to recycle approximately the same number of cans each day, about how many more days would you need to reach 10,000 recycled cans?

8. A lease for a car requires a total of \$11,159.64 over 36 payments. Estimate the monthly payment.

9. Choose the set that is ordered correctly from greatest to least and state how you know.

a. $\frac{6}{7}, \frac{1}{3}, \frac{3}{4}$

b. $\frac{8}{9}, \frac{1}{2}, \frac{5}{6}$

c. $\frac{2}{3}, \frac{9}{10}, \frac{15}{20}$

d. $\frac{5}{6}, \frac{7}{13}, \frac{1}{2}$

Open-Ended Question: Answer the following question on a separate piece of paper. Make sure as you answer the open-ended question that you show your work AND explain how you know you are doing the correct work. YOU MUST EXPLAIN WHAT YOU ARE DOING!!!

The food concession owner at a stadium knows that about $\frac{1}{2}$ of all people attending a game buy a snack. He knows that of these, about $\frac{1}{3}$ will buy hot dogs. He also knows that he should have at least 1000 extra hot dogs on hand.

A. Explain how the owner can decide how many hot dogs he needs to have ready if a crowd of 31,200 people is expected.

B. Using your answer to part A, how many hot dogs will he have at the game?